

Claims

What is claimed is:

- 5 1. A method for detecting compounds that effect inflammation, comprising,
 - a) adding to cells a composition comprising a compound suspected of effecting inflammation;
 - 10 b) adding a stimulatory agent;
 - c) measuring an amount of at least one determinant of inflammation; and
 - d) comparing the amount of the at least one determinant from c) with an amount of at least one determinant from cells treated with the stimulating agent.
- 15 2. The method of Claim 1, wherein b) adding a stimulatory agent precedes a) the adding of a composition suspected of effecting inflammation to cells.
- 20 3. The method of Claim 1, wherein a) adding a composition comprising a compound suspected of effecting inflammation to cells; and b) adding a stimulatory agent, occur simultaneously.
- 25 4. The method of Claim 1, wherein the compound is a chemical element, molecule, compound, mixture, emulsion, chemotherapeutic agent, pharmacological agent, hormone, antibody, growth factor, cellular factor, nucleic acid, protein, peptide, peptidomimetic, nucleotide, carbohydrate, and combinations, fragments, analogs or derivatives of such
- 30 entities.
5. The method of Claim 1, wherein the stimulatory agent is a glycated protein.

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6. The method of Claim 5, wherein the glycated protein is G-HSA, or AGE.

5 7. The method of Claim 1, wherein the determinant of inflammation comprises a cellular factor selected from the group consisting of NF κ -B, IL1- β , IL-11, m-CSF, fibrinogen, TNF- α , adhesion molecules, selectins, VCAM-1, CRP, MCP-1 or PAI-1.

10 8. A composition, comprising a compound effective for treatment of inflammation, as determined by the method of Claim 1.

15 9. The composition of Claim 8 in a pharmaceutically acceptable carrier.

10. A method for detecting compounds that effect glycated protein accumulation, comprising,

20 a) adding to cells a composition comprising a compound suspected of effecting glycated protein accumulation;

b) adding a stimulatory agent;

c) measuring an amount of at least one determinant of glycated protein accumulation; and

25 d) comparing the amount of the at least one determinant from c) with an amount of at least one determinant from cells which have been treated with a glycated protein.

30 11. The method of Claim 10, wherein b) adding a stimulatory agent precedes a) the adding of a composition suspected of effecting glycated protein production to cells.

12. The method of Claim 10, wherein a) adding a composition suspected of effecting glycosylated protein production and b) adding a stimulatory agent occur simultaneously.

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13. The method of Claim 10, wherein the compound is a chemical element, molecule, compound, mixture, emulsion, chemotherapeutic agent, pharmacological agent, hormone, antibody, growth factor, cellular factor, nucleic acid, protein, peptide, peptidomimetic, nucleotide, carbohydrate, and combinations, fragments, analogs or derivatives of such entities.

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14. The method of Claim 10, wherein the stimulatory agent is G-HSA, or AGE.

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15. The method of Claim 10, wherein the determinant of glycosylated protein accumulation comprises a cellular factor selected from the group consisting of NF- κ B, IL-1 β , IL-11, m-CSF, fibrinogen, TNF- α , adhesion molecules, selectins, VCAM-1, CRP, MCP-1 or PAI-1.

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16. A composition that effects glycosylated protein accumulation as determined by the method of Claim 10.

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17. The composition of Claim 16 in a pharmaceutically acceptable carrier.

18. A method for treating inflammation, comprising, administering to a human or animal an effective amount of a composition comprising at least one compound capable of effecting inflammation, wherein the compound is determined by the method of Claim 1.

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19. The method of Claim 18, wherein the inflammation is glycated protein inflammation.

5 20. The method of Claim 18, wherein the inflammation is vascular complications of diabetes, ventricular hypertrophy, atherosclerosis, angiopathy, myocarditis, nephritis, arthritis, glomerulonephritis, microangiopathies, renal insufficiency and Alzheimer's disease.

10 21. The method of Claim 18, wherein inflammation is stimulated.

22. The method of Claim 18, wherein inflammation is inhibited.

15 23. A method of treating inflammation, comprising administering to a human or animal an effective amount of a composition comprising at least one compound capable of effecting glycated protein accumulation for the treatment of inflammation-induced diseases.

20 24. The method of Claim 23, wherein the inflammation-induced diseases are vascular complications of diabetes, ventricular hypertrophy, atherosclerosis, angiopathy, myocarditis, nephritis, arthritis, glomerulonephritis, microangiopathies, renal insufficiency and Alzheimer's disease.

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